REMARKS

Allowable Subject Matter

Applicants gratefully acknowledge the Examiner's indication that claims 35, 36 and 74 recite allowable subject matter.

Amendments

The claims as filed were misnumbered. Specifically, claims "48" and "55" were not included in the original claims. Thus, the original total number of claims was 73, not 75. For this reason, when applicants filed a Reply of May 23, 2003, adding two new claims, these new claims were numbered 74 and 75, rather than 76-77. In the new listing of the claims presented above, the original claims are presented with their numbering corrected by amendments.

Claim 1 is amended to change "I" to "l." Similar amendments are made to claims 33-34, 54, 56, and 71. Claim 1 is also amended to correct the spelling of unsubstituted. Similar amendments are made to claims 54, 57, 68 and 71. Other typographical errors in the claims are also corrected. The scopes of these claims are not narrowed by amendments.

Claims 38-40, 55-56 and 75 are amended to depend from claim 54. Claims 46, 48, 50, 51, 58 and 59 are amended to depend from claim 57. Claims 37, 43, 44, 45, 49, 52, 53, and 62-67 are cancelled. These claims are cancelled to further prosecution. Their cancellation should not be construed as acquiescence to any ground of rejection.

Claims 74 and 75 are amended to also refer to pharmaceutically acceptable salts. New claim 76 is the same as claim 75, except that it depends from claim 57. New claims 77-79 are directed to a particular compound and its salts. See the first compound listed in claim 35. New claims 80-82 are directed to further aspects of the invention and are supported throughout the disclosure.

Rejection Under 35 USC §112, second paragraph

Using the phrase "or combinations thereof" to indicate that a group can be substituted by two or more of the listed substituents is conventional under US patent practice. One merely needs to do a word search on the claims of US patents issued in the

last year to recognize that this phrase is not only common, but its use is wide spread. The wide spread use of the term demonstrates that it is not indefinite, and its meaning is clear to one of ordinary skill in the art.

The rejection provides no rationale as to why one of ordinary skill in the art would consider "alkyl substituted by halogen, hydroxy or combinations thereof" to include an alkyl group that is somehow substituted by a single substituent that is a combination of a halogen and a hydroxy group. This is not what is intended, and one of ordinary skill in the art would recognize this, rather than speculating about an impossible structure. One of ordinary skill in the art would instead understand that "alkyl substituted by halogen, hydroxy or combinations thereof" is meant to include, *inter alia*, alkyls which are disubstituted by a hydroxy group and a halogen. Deleting "combinations thereof," as suggested would result in confusion, rather than any clarification, particularly when clarification is unnecessary. However, if the Examiner wishes, applicants' will replace "combinations thereof" with the expression "and/or," e.g., "alkyl substituted by halogen, and/or hydroxyl."

Contrary to the assertion in the rejection, "C_{2-4}-acyl" is completely clear. The expression identifies the chemical group, i.e., acyl, and specifies the number of carbons in that group, i.e., 2 to 4. The scope of this term is clear to one of ordinary skill in the art.

With respect to the alleged different notations, "I" is both capital i and Roman numeral one. Similarly, "l" is both capital i and Roman numeral one. The difference is only the type of font, i.e., Times New Roman and Arial, respectively. The claim language is sufficiently clear, and one or ordinary skill in the art would not find the difference in fonts to be indefinite. However, to facilitate prosecution, the claims are amended to use the Arial font for the numbers of the formulas.

As for original claims 45-47, the Examiner argues that because "it is clear" that the patient of claim 46 is suffering from cognition impairment, claim 47 fails to further define claim 46. But, claim 46 recites that the patient is suffering cognition impairment or decline (see claim 45) whereas claim 47 recites that the patient is suffering from memory impairment. The Examiner has presented no rationale as to why these conditions are of the exact same scope, or why "cognition impairment or decline" is not generic to "memory impairment." In any event, claim 45 is cancelled and claim 46 is

amended to depend from claim 57.

Withdrawal of the rejection is respectfully requested.

Rejection of claims 37-44, 45-49 and 75 Under 35 USC §112, first paragraph

Claims 45-49 and 75 are rejected as allegedly being nonenabled under 35 USC 112, first paragraph. This rejection is respectfully traversed. Claims 37-44 are also rejected as allegedly being nonenabled under 35 USC 112, first paragraph. This rejection is also respectfully traversed.

In the rejection, it is argued that claim 45 recites a method of treating cognition impairment or decline, and that this scope is not enabled. This is a conclusory statement, for which no support is provided. Similarly, it is argued that claim 37 recites a method of enhancing cognition impairment, and that this scope is not enabled. This is also a conclusory statement, for which no support is provided.

The rejection presents "descriptions" of cognitive impairment, dementia, cortical dementia, subcortical dementia, delirium, acute confusional states, mental retardation, major depression, and autism. No explanation is provided as to the source of these descriptions. Nor does the rejection demonstrate why one of ordinary skill in the art would, upon reading applicants' specification, consider "cognition impairment or decline" to include each of these conditions. Furthermore, merely because the rejection implies that "treating cognition impairment or decline" is broad, this does not establish reasons to doubt the veracity of statements within applicants' specification. Similarly, the rejection argues that the method of enhancing cognition is the same as treating cognition disorders. This assertion also does not establish reasons to doubt the veracity of statements within applicants' specification.

All that is required under the statute is objective enablement. It is not required that applicants' disclosure present specific test results. See, e.g., *In re Marzocchi et al.*, 169 USPQ 367, 369(CCPA 1971):

> The first paragraph of §112 requires nothing more than objective enablement. How such a teaching is set forth, either by the use of illustrative examples or by broad terminology, is of no importance.

An application disclosure which contains a teaching of the manner and process of making and using an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken in compliance with the enabling requirement of the first paragraph 35 U.S.C. § 112 unless there is reason to doubt the objective truth of statements contained therein relied on for enabling support. *In re Brana, 51 F.3d 1560,* 34 USPQ2d 1436 (Fed. Cir. 1995). *Fiers v. Revel, 984 F.2d 1164,* 24 USPQ2d 1601 (Fed. Cir. 1993). Furthermore, as stated in *In re Marzocchi*, 169 U.S.P.Q. 367, 369 (CCPA 1971), the PTO must have adequate support for its challenge to the credibility of applicant's statements of utility. See also *In re Bundy*, 209 USPQ 48 (CPA 1981).

Thus, the burden does not initially lie with applicants to prove that their statements in the specification of how to use the claimed polymer are true. The burden of proof lies first with the PTO to properly support a rejection under 35 U.S.C. §112, first paragraph, for lack of enablement, by providing evidence or objective reasoning substantiating the allegation that the enabling disclosure is not commensurate in scope with the claims. In re Marzocchi et al., 169 USPQ 367 (CCPA 1971). As stated in Marzocchi,

> ..a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of §112 *unless* there is reason to doubt the objective truth of the statements contained therein..

and further,

> ..it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement." (emphasis original).

Also, it is by now well settled law that the test for enablement is not whether any experimentation is needed but whether or not that experimentation is undue. See, *In re Angstadt*, 190 USPQ 214, 219 (CCPA 1976) in which the art involved (catalysis) was acknowledged to be unpredictable. Even a considerable amount of experimentation, or complex experimentation, is permissible if it is routine. See, e.g., *Ex parte Jackson,* 217

USPQ 804, 807 (POBA 1982) and *In re Wands*, 8 USPQ 2d 1400, 1404 (Fed. Cir. 1988)

In view of the above remarks, it is respectfully submitted that Applicants' disclosure provides more than sufficient guidance to objectively enable one of ordinary skill in the art to make and use the claimed invention with no more than routine experimentation. Thus, the rejection should be withdrawn. In any event, claims 45 and 49 are cancelled above, and claims 46,48, and 75 are amended to depend from other claims. Withdrawal of the rejection under 35 U.S.C. §112, first paragraph, is respectfully requested.

Rejection of claims 45 and 49 Under 35 USC §112, first paragraph

It is alleged that Applicants' disclosure is not enabling for all of treating all of the diseases recited in claim 49. In the event, the rejection fails to establish reasons to doubt the veracity of statements in Applicants' specification.

In the rejection, it is argue that the only treatments available today for treating Alzheimer's disease are those which inhibit acetylcholinesterase. This statement is a mere conclusion, unsupported by any evidence. Furthermore, enablement under 35 U.S.C. § 112, first paragraph, does not require that methods of treatment must be approved by the FDA before they can be patented. As to the assertion that Alzheimer's can only be treated by acetylcholinesterase inhibitors, this is clearly contrary to the state of the art as there are a vast number of patents directed to the treatment of Alzheimer's using agents other than acetylcholinesterase inhibitors. Moreover, Applicants' claims are directed to the treatment of memory impairment as a result of certain disease conditions, and do not require that the overall disease conditions themselves be treated.

The rejection also argues that treatments available for Parkinson's disease are drugs that are helpful in regulating dopamine. Here again, no evidence is presented to support this statement. FDA approval is not required for patentability. And, Applicants' claims are directed to the treatment in memory impairment.

The comments in the rejection regarding treatments of stroke and cardiovascular disease similarly do not present a reason to doubt the veracity of Applicants' statements concerning the treatment of memory impairment as a result of such conditions.

For these reasons, the rejection should be withdrawn. In any event, claims 45 and

49 are cancelled. In review of the above remarks, withdrawal of all the rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Rejection of claims 62-67 Under 35 USC §112, first paragraph

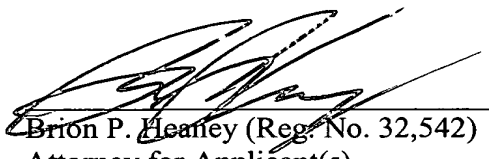
In the rejection it is argued that there is no agent for treating neuro-degenerative diseases generally and that many neuro-degenerative diseases are untreatable. Here again, these assertions do not provide any reason to doubt the veracity of the statements in Applicants' specification. Moreover, Applicants' claims 62-67 are directed to the methods of treating memory impairment due to neuro-degenerative orders, and do not require the treatment of neuro-degenerative disorders in general. For these reasons, the rejection should be with drawn. In any event, claims 62-67 are cancelled. In view of the above remarks, withdrawal of all the rejection under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Rejection of claims 68-70 Under 35 USC §112, first paragraph

In the rejection, it is argued that it is enablement for the scope of inflammatory diseases in general is not provided by Applicants' specification. However, the arguments presented in the rejection are conclusory and fail to establish any reason to doubt the veracity of the statements presented in Applicants' specification. Moreover, the use PDE4 inhibitors for the treatment of inflammatory diseases is well known and well documented. See, for example, the prior art cited at page 49, lines 13-18 of the specification. The assertions presented in the rejection present no reason to doubt that PDE4 inhibitors can be used for the treatment of inflammatory disease, especially since one of ordinary skill in the art is well aware of use of PDE4 inhibitors for just such treatments.

In view of the above remarks, withdrawal of the rejections under 35 U.S.C. § 112, first paragraph is respectfully requested.

Respectfully submitted,



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